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Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

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Petition of Bell Atlantic Corporation)	
for Relief from Barriers to Deployment)	
of Advanced Telecommunications Services)	CC Docket No. 98-11
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COMMENTS OF THE COMMERCIAL INTERNET EXCHANGE ASSOCIATION

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ADSL and the Collocation Issue.....

Figure 4

SUMMARY

The Commercial Internet eXchange Association ("CIX") looks forward to the day when a multitude of broadband data access options are available to the American public. A grant of the Bell Atlantic Petition, however, is quite unlikely to hasten that day. CIX is concerned that Bell Atlantic's Petition, if granted, would extend the incumbent LEC's local access monopoly to the Internet. Specifically, CIX finds that:

- Competition and innovation on the Internet continues at an unprecedented pace.

 Bell Atlantic's factual premise that the Internet is too congested, and fails to respond to market demand, is fundamentally flawed.
- Internet competition and innovation is best served through a regulatory structure that permits broad access to the incumbent LEC's network. Bell Atlantic's approach, by contrast, would close its network to competitive providers.
- Bell Atlantic neglects to address key competitive and public interest issues, including: (a) failure to describe how competing independent Internet Service Providers would connect to customers through the Bell Atlantic broadband data services; (b) failure to address the inherent discrimination that results from deployment of xDSL when independent ISPs lack collocation; (c) failure to articulate what improvements would be made to the Internet backbones.
- The 1996 Act properly places competitive safeguards on Bell Company participation in the interLATA services market to ensure open, nondiscriminatory, local competition. Consistent with this goal, the 1996 Act also limits the Commission's authority to forbear from these cornerstones of the legislation -- the Commission may not forbear from Section 251(c), 271, and 272 as Bell Atlantic requests.
- Local competition is well served by the policies for network unbundling (including elements of the incumbent LEC's data access equipment), wholesale resale, and Open Network Architecture. A loss of these competitive safeguards would

jeopardize the present and future broadband data access options for the American consumer.

For these reasons, CIX does not support the Bell Atlantic Petition.

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COMMENTS OF THE COMMERCIAL INTERNET EXCHANGE ASSOCIATION

The Commercial Internet eXchange Association ("CIX"), by its attorneys, files these comments on the "Petition of Bell Atlantic" (the "Bell Atlantic Petition" or "Petition"). CIX is a trade association that represents over 150 Internet Service Providers who handle over 75% of the United States' Internet traffic. CIX works to facilitate global connectivity among commercial Internet service providers ("ISPs") in the United States and throughout the world. A CIX membership list is attached hereto. CIX is quite concerned that a grant of the Bell Atlantic Petition would amount to nothing less than a new RBOC data local access monopoly, to the detriment of the innovative and competitive Internet services.

Introduction

CIX heartily supports the development of new telecommunications services that offer data users more innovative opportunities to access the Internet. Thus, in addition to traditional voice-grade wireline access, CIX anticipates the day when local competition among telecommunications carriers, as envisioned by the 1996 Act, will yield a host of exciting alternatives to the current incumbent Local Exchange Carrier ("ILEC") monopoly services.

The views expressed herein are those of CIX as a trade association, and are not necessarily the views of each individual member.

These new providers and services will surely compete for the American consumer in terms of price (e.g., services that are competitive with ILEC ISDN offerings), quality of service (e.g., more responsive installation and customer care services), access convenience and portability (e.g., terrestrial wireless data and satellite data services), as well as a greater bandwidth options with alternative technologies engineered for data packet-switched communications.

CIX believes that competition for Internet services is well-served by the Telecommunications Act of 1996 ("1996 Act") and the Commission's on-going policies for competitive safeguards governing ILEC participation in the information services markets. Consistent with these regulatory and statutory goals, incumbent LECs must continue to keep the underlying telecommunications services (which should include unbundled elements of those services) open on equal and affordable terms for all competing telecommunications and Internet providers. Indeed, because the local access to both business and residential customers is still wholly in the hands of the ILEC, a competitive information and Internet market *can only* exist when all Internet providers have access at competitive prices to the same underlying ILEC telecommunications service offerings.

In CIX's view, the Bell Atlantic Petition is fundamentally antithetical to these principles of competitive safeguards, open access to telecommunications services, and rigorous competition among Internet providers. If granted, it could devastate the vast majority of ISPs that lack facilities of their own and must rely on "equal access" to the ILEC network in order to reach their residential and business customers. Similarly, CLECs and other telecommunications carriers that could offer xDSL to ISPs in competition would be deprived of their unbundling and resale rights.

Further, while it has yet to demonstrate the minimum statutory criteria for in-region local competition, Bell Atlantic vaguely contends that its own in-region interLATA entry can solve a purported Internet backbones congestion problem. In CIX's view, Bell Atlantic asks the Commission to act in ways that exceed its statutory forbearance authority and that are otherwise contrary to the innovation directives of Section 706 of the 1996 Act. CIX is confident that the

success of the Internet cannot be measurably improved on by Bell Atlantic, and may be significantly harmed if the Commission approves Bell Atlantic's vague plan for a local data access monopoly.

Discussion

I. Bell Atlantic Misapprehends Competition and Innovation on the Internet.

The Bell Atlantic Petition rests on a very simple "public interest" goal: "[r]emoval of [regulatory] barriers will enable the Bell Companies to use their technical and financial clout to provide advanced Internet access services to all their customers and to build larger and faster backbones that can take advantage of the local technologies." According to Bell Atlantic, today's Internet is not how the American people should like it: "[t]he upper levels of the network are too slow, too congested, too unstable . . . to provide high-speed, high-bandwidth services to all Americans. Moreover, it is only getting worse "3 CIX finds that the Petition is essentially grounded on factually dismal and anecdotal perceptions of the state of competition, investment, and innovation on the Internet. In sum, the goals of Section 706 for "advanced telecommunications capability to all Americans" are unlikely to be realized through a grant of the Petition.

A. There Is No Internet Capacity Crisis to be "Solved" By Bell Atlantic

The Internet industry is experiencing a period of unprecedented growth, contrary to assertions of Bell Atlantic that new technologies are being deployed and adopted at a slow pace. The number of Internet hosts that store information, interact, and relay communications

[&]quot;White Paper Supporting Petition Under Section 706 of the Telecommunications Act of 1996," at 57-58 (dated Jan. 26, 1998) ("Bell Atlantic White Paper").

^{3 &}lt;u>Id</u>; Bell Atlantic Petition at 15-17.

increased from 1.3 million in 1993 to 19.5 million in 1997.⁴ In the United States, there exist over 4,000 Internet Service Providers and over 60 million Internet users.⁵ The extraordinary growth of the Internet is due to the efforts of many different industries and technological advances. While traditional circuit-switched telephony continues to move slowly towards open competition, the Internet Service Provider industry has been highly competitive from its inception, fostering low prices for residential and business Internet connectivity.

Bell Atlantic claims that today's level of bandwidth congestion and Internet speeds are a consequence of "limited capacity of the backbone networks . . . [w]ith the backbone infrastructure choked at . . . lower speeds" Petition at 13. This is ironic, since the level of demand for Internet bandwidth demonstrates that the Internet works well; it is not an indication of network "failure." While any successful network in today's global economy may face periods or incidences where demand outstrips supply, Bell Atlantic fails to coherently explain that the current market-based investments made on the Internet are reacting improperly to market demand for bandwidth. Instead, Bell Atlantic posits that industry "Consolidation" and "Business Customer Focus" are focusing today's Internet providers away from investment in the Internet infrastructure.

CIX submits that Bell Atlantic's understanding of Internet Investment issues is nonsensical. *First*, the "consolidation" story is simply Bell Atlantic's re-stated opposition to the MCI-WorldCom merger (the subject of a separate proceeding), it is not an explanation of Internet congestion. Indeed, Bell Atlantic's expert does not even claim that "consolidation," if shown,

Internet Domain Survey, July 1997, Produced by Network Wizards and available on the World Wide Web at http://www.nw.com/>.

^{5 &}lt;u>Id</u>.

would tend to cause Internet congestion.⁶ To the contrary, Mr. Hazlett *speculates* that consolidation will "spur investment in infrastructure" and "raise . . . quality of service" as it raises prices for ISPs.⁷ *Second*, the claim that the Internet now has a "Business Customer Focus" is absurd.⁸ There are thousands of ISPs that serve residential customers.⁹ Moreover, the claim makes little sense because business customers demand ISP services that are fast, reliable, and redundant, and so ISPs serving businesses have every incentive to invest in additional network development. Thus, Bell Atlantic offers no plausible explanation for its assertions that market demand of the Internet is inadequately met by the existing market.

Perhaps Bell Atlantic's perception of the Internet as virtually on the brink of "chaos" is explained by the fact that the Internet is fundamentally unlike the monopoly network that Bell Atlantic owns and operates on an end-to-end basis. Compared to the monopoly local telecommunications network, participation on the Internet must surely seem "fraught with risk" (Petition at 17) because the Internet is inherently decentralized in nature, and responds quickly to market demand. CIX believes it would be a grave mistake to permit Bell Atlantic to superimpose its more centralized, monopoly model on the Internet.

Petition, Attachment 1, Decl. of T. Hazlett.

⁷ Id. at 4, 8.

In considering this argument, it is also noteworthy that Bell Atlantic's recent statements indicate a *business* customer focus for its broadband network. "Bell Atlantic Steps Up Deployment of High-Speed, Broadband Data Network" (Mar. 30, 1998) at <www.ba. com/nr/1998/Mar/199803300001.html> ("Businesses looking for the most futuristic, reliable and efficient network for . . . data applications need look no further than Bell Atlantic.").

See e.g., "ICG Launches IP Telephony Offering, Plans DSL Rollout,"
<u>Telecommunications Reports</u>, at 33 (Mar. 16, 1998) (ICG's DSL rollout will focus on home-based business and telecommuters).

However, Bell Atlantic's lack of Internet experience itself speaks volumes as to the likelihood that it would bring any measurable "innovation" to the Internet. It has been only two years since Bell Atlantic first commenced its residential and business ISP service, and even today it serves "only about 90,000" Internet subscribers. Petition at 20. Other Internet providers, including all major backbone providers, have been in the Internet business for many more years, have far more Internet service experience, and have assembled management and technical teams that have literally built today's Internet. Bell Atlantic's lack of involvement in the Internet suggests that it may not fully appreciate the promises its Petition makes.

For example, if the Petition is granted, exactly how would Bell Atlantic "revolutionize" the Internet backbones? Bell Atlantic does not say. It seems that Bell Atlantic would enter the market in one of two ways: either by purchasing an existing backbone provider, or by laying its own lines. The acquisition of an existing provider, however, would not necessarily cure any of the alleged network congestion issues that it claims is lacking in today's Internet; indeed, "buying" its way onto the backbones would only exemplify the sort of consolidation so excoriated in the Petition. Alternatively, laying lines to create a new multi-state network takes significant time and bears with it considerable uncertainty. Either way, the "public interest" promises that Bell Atlantic makes for enhancing short-term Internet capacity are likely to ring hollow.

Bell Atlantic's aspirations for a more robust backbone are more likely to be confronted by the same market realities faced by the several other Internet backbone companies today: the *market demand* for high capacity network services will drive the supply of Internet network deployment. Thus, the presence of Bell Atlantic, as one among several companies providing Internet backbone service, is neither a necessary nor sufficient component to achieve the market-based deployment of higher capacity on the Internet.

B. Market Investment and Innovation in the Internet Backbones Are Significant and Fundamentally Sound

Every indication is that the Internet backbones are rapidly upgrading as quickly as possible to meet network demand and to offer a host of innovative services. All of the major backbone providers including AT&T, MCI, Sprint, PSINet, UUNET and Qwest are rapidly deploying advanced broadband networks. Several examples sufficiently put the Bell Atlantic's notion of inadequate investments on the backbones to rest.

- Qwest is currently constructing a 16,000 mile network that is scheduled to be completed in the 2nd quarter of 1999, of which currently only 3,500 miles of this are activated.¹⁰ This is obviously a very aggressive growth plan.
- Sprint on September 3, 1997, announced that it would increase bandwidth by 400 percent. Sprint stated that this upgrade "allows Sprint to continue to meet and stay ahead of the increasing traffic demands on its Internet backbone."
- In October of 1997, AT&T announced that it would offer its Worldnet Internet Service over its own IP backbone, rather than through it previous arrangement where it contracted its Internet services to other providers. ¹²
- PSINet acquired the rights to use 10,000 miles of IXC's OC-48 switched network that will be used for its Internet backbone capacity. This network is 50 times faster than the T3 backbone that is dominant today. In a press release announcing this increased capacity PSINet stated, "We aren't dependent on telcos for our network infrastructure: as a result, we can deliver our services in a more timely manner and are less effected by

¹⁰ http://www.qwest.com/press/12998.html

¹¹ http://www.sprint.com/sprint/press/releases

¹² http://www.att.com/press

incidents that affect other carriers' networks and business plans."¹³ PSINet emphasized that they have the bandwidth necessary to support customers requirements for the foreseeable future.

• UUNET in October of 1997 announced its new service OCDirect. This service is designed to meet the bandwidth requirements for high-capacity users such as Internet service providers, Internet content providers, large corporations, and organizations with large Web sites. UUNET is able to offer this service as a result of a \$300 million dollar investment in network infrastructure, which significantly raised the speed of its backbone.¹⁴

More generally, as one industry expert recently noted that, while three years ago available Internet bandwidth doubled every year, bandwidth today doubles every 4 to 6 months. ¹⁵ For Bell Atlantic to insinuate that adequate investment in the backbones is not occurring is nonsensical.

In CIX's view, the sources of significant congestion on the Internet lie not on the backbones, but primarily at the information provider's source. ¹⁶ Network Access Point ("NAP") congestion is also far less frequent today and, to the extent that it occurs, Internet providers oftentimes resolve those issues without regulatory intrusion through private peering arrangements that by-pass the NAPs or through routing to more efficient NAPs to avoid temporary network congestion.

http://www.psi.net/news/pr/98/ixccomplete.html

http://www.us.uu.net/press/oc3.shtml

Statement of Alan Taffel, UUNET Technologies, at Internet World (Los Angeles, CA March, 1998).

Specifically, congestion can occur because of limitations of the capacity of the content provider's server.

C. Competition and Innovation on the Internet is Better Served Through Open Access to Advanced Local Telecommunications Services

CIX certainly applauds Bell Atlantic's efforts to deploy xDSL technologies.¹⁷ However, to better serve users' data and telephone needs, the ILEC's access lines and network (whether combined with ADSL or other technologies) must remain open with competitive safeguards, including unbundling and resale, for robust competition to develop. This is not just the statutory mandate of the 1996 Act, but a principle that must be held to if local telecommunications competition is to emerge. If not, Americans will find themselves -- once again -- locked into local access monopoly that seemed state-of-the-art at one time, but which will eventually be surpassed by ongoing progress of the competitive technology markets.

As Bell Atlantic correctly points out, deployment of efficient local access technologies is critical to the sustained growth of the Internet. The Internet is, in fact, a continuing test-bed for new technologies: those that work and meet market demand, those that do not quickly fail on the Internet. As stated by Thomas Hazlett, "[t]he rapid adoption of technologies which allow businesses and individuals to access the Internet is astounding." By comparison, the rate of innovation on the PSTN, which has been Bell Atlantic's proving ground for decades, is far less impressive. For example, the ILECs' slow rate of ISDN deployment may be a harbinger of ILEC xDSL service roll-out. In the Internet market, an Internet year (in terms of depreciation) is

[&]quot;xDSL" connotes a group of related telecommunications services, including "Asymmetric Digital Subscriber Line" ("ADSL") which offers download speeds of up to 9 Mbps and upload speeds of 1.5 Mbps. Other variants of xDSL services include High-data-rate Digital Subscriber Line ("HDSL") (promising an upload and download speed of up to 2 Mbps) and Very-high-data-rate Digital Subscriber Line ("VDSL") (promising a download speed up to 52.8 Mbps).

Petition, Attachment 1, at 1.

measured in a matter of months. Currently in the United States, CIX estimates that every major backbone provider plans to double its backbone capacity every quarter.

Equally important for the long term growth of Internet communications are the regulatory and market efforts to make the local market more competitive and diverse, which is not where it is today. In fact, Bell Atlantic and other ILECs continue to control 99% of the country's local service business. ¹⁹ CIX believes that it is more important to ensure the continued growth of local competition -- a path that the Commission has worked for so arduously -- than it is to ensure the success of any given ILEC technology application as it competes on the Internet.

Moreover, Bell Atlantic has not demonstrated that it actually needs the exemptions from statutory and regulatory obligations in order to effectively deploy xDSL. For example, Bell Atlantic could deploy xDSL on an intraLATA basis as the market demands it and consistent with existing statutory obligations. As it does so, the existing competitive Internet backbone providers will meet such demand for high-speed services, or, as Bell Atlantic obtains Section 271 interLATA authority, it can enter the market to provide Internet backbone services through its Section 272 affiliate. Bell Atlantic apparently has not even attempted to work out alleged short-term capacity issues with the existing Internet backbone providers, because it would obviously prefer to own all facilities from the customer's home to the global Internet.²⁰

^{19 1996} Trends in Telephone Service, Industry Analysis Div. - CCB, at Table 9.1 (Feb. 1998) (nationwide, CAPs/CLECs in U.S. captured only a 1.0% share of 1996 local service revenues, up from 0.7% in 1995).

For example, the Commission has held that, even prior to Section 271 approval, RBOCs may engage in nondiscriminatory "teaming" relationships with interLATA providers. Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act, as Amended, <u>First Report and Order and Further Notice of Proposed Rulemaking</u>, CC Dkt. No. 96-149, 11 FCC Red. 21905, 22047 (1996) ("<u>Non-Accounting Safeguards Order</u>").

Indeed, to avert loss of local market share, Bell Atlantic seemingly has sufficient financial incentive to deploy a broadband network within the ambits of the current law. Just last week, Bell Atlantic announced that it would accelerate its deployment of a \$1.5 billion high-speed broadband network.²¹ Bell Atlantic, US West, and Ameritech have already commenced at least some ADSL market testing. Bell Atlantic has ongoing ADSL market trials in Northern Virginia. U S West has already filed tariffs in several in-region states to commence ADSL service in April, 1998. Within the year, the ILECs will have already invested in significant ADSL deployment throughout the United States. Notably, Bell Atlantic has provided no study or showing that intraLATA deployment of xDSL is economically infeasible. Further, it seems improbable that the Bell Companies would have so fully committed themselves (and would have promised high bandwidth to residential and rural customers) if the feasibility of ADSL deployment actually hinges on the grant of the Petition.

Bell Atlantic has both financial and strategic incentives to deploy intraLATA ADSL, irrespective of the outcome of its Petition. Financially, Bell Atlantic risks a significant loss of their existing market share in the local data access market, as the threat of other local telecommunications providers and the demand for data services become more real. In terms of strategy, Bell Atlantic must also plan to participate in the ever-growing Internet communications marketplace, and to form strategic alliances for the long term. It has, in fact, formed such powerful strategic alliances. Bell Atlantic's participation in the ADSL Forum provides it an important strategic opportunity to work with computer hardware and software providers (e.g., Microsoft, Intel, Compaq) and other incumbent LECs (e.g., US West, Ameritech, and Pacific Bell) to control and resolve xDSL technical and deployment issues. Thus, placed in the context

[&]quot;Bell Atlantic Steps Up Deployment of High-Speed, Broadband Data Network" (Mar. 30, 1998) at <www.ba. com/nr/1998/Mar/199803300001.html>.

of its long-term business interests, Bell Atlantic's need for statutory and regulatory exemptions -- exemptions which ensure local telecommunications competition and competition among ISPs -- is doubtful.

To the extent Bell Atlantic faces any financial challenges in the deployment of xDSL, it is due to the market interplay between the ILEC's xDSL roll-out and its own profitable second and third line sales and dedicated access (including T1) sales. However, that market-based decision must be made by the ILEC regardless of the outcome of its Petition.

II. The Bell Atlantic Petition Is Vague, Premature, and Leaves Key Competitive Issues Unresolved.

While it asks for regulatory relief in the broadest terms possible, the Bell Atlantic Petition is extremely vague. Bell Atlantic even fails to provide a coherent description of the service for which it asks relief. It appears, however, to ask the Commission to deregulate the following end-to-end service package: (a) local xDSL access service, (b) Bell Atlantic Internet Service, and (c) long-distance interLATA data capacity. However, Bell Atlantic fails to explain the service plan; nor does it recognize how the distinct services are, in fact, based on Bell Atlantic's monopoly over local lines and access. Further, Bell Atlantic fails to explain how competing ISPs are to gain access to this service, to compete with the Bell Atlantic Internet Services, or to access homes and businesses that have chosen xDSL. Nor does Bell Atlantic provide its plan, or even indicate that it has developed an actual plan, to implement the primary "public interest benefit" it offers: the increase of average Internet backbone data rates to xDSL levels. Without answers to these questions, it is quite impossible for either the public or the Commission to adequately examine whether the Bell Atlantic Petition is in the public interest.

Finally, the Commission has already held that it will initiate the implementation of Section 706 through a general rulemaking proceeding. Company-specific deregulatory measures can be fully evaluated by the public only after the Commission has laid down its Section 706

regulatory framework for such requests. Until that time, consideration of the Bell Atlantic Petition is premature.

A. Bell Atlantic's Petition Is Vague On What Service It Proposes to Deregulate

Bell Atlantic claims, with very little description, that the xDSL service for which it seeks deregulation and forbearance is somehow an interstate information service. Petition at 3, n. 3.

CIX is puzzled by that description because xDSL is a technology that would make more dataefficient use of Bell Atlantic's existing access lines from the customer to the ILEC's central office. Even if, however, Bell Atlantic means to say is that it chooses to bundle its facilitiesbased xDSL with its Internet access service and long-distance Internet backbone service, then the xDSL access services remain telecommunications that must be separately provisioned.²² From a policy perspective, this distinction is important because Bell Atlantic's proposed xDSL service would undeniably obtain fundamental advantages due to its existing monopoly over access lines and central office facilities. Thus, in presenting the merits of its request, Bell Atlantic must address why its xDSL service should be deregulated when such a service is so *intrinsically married* to its local access monopoly. Until Bell Atlantic explains exactly what services it will provision, what regulations will remain in effect, and what bundling of existing services will occur, the Petition remains hopelessly vague. C.f., 47 C.F.R. § 1.41 (requests for Commission action must "set forth clearly and concisely the facts relied on, [and] the relief sought").²³

²² AT&T Frame Relay Order, 10 FCC Rcd. 13717, 13725 (CCB 1995).

See also, Northeast Cellular Telephone Co. v. FCC, 897 F.2d 1164, 1167 (D.C. Cir. 1990) (requests for waivers of FCC rules and orders must present the facts necessary upon which the Commission may base an articulable standard for the waiver).

1. Bell Atlantic's Proposed xDSL Service Appears To Be A Local Telecommunications Service Using ILEC Access Lines Bundled With Internet Access and with InterLATA Internet Capacity.

While Bell Atlantic fails to describe exactly how it would provision ADSL, the Bell Atlantic press releases on ADSL market trials as well other industry sources provide a clearer picture. ADSL "is a modem technology that places digital bits in the inaudible frequency of your standard telephone line. The line is split at your home, carrying voice to your telephone or fax machine and data to your computer via an ADSL Terminal Unit-Remote (ATU-R)."²⁴ In order to deliver such powerful capabilities,²⁵ modem and computer facilities are installed at both the customer premises and integrated with existing lines at the ILEC's central office. At the customer end, the ADSL modem splits the voice transmission channels apart from the upload/download data channels. In this way, a customer may lease a single ILEC line to maintain continual high-speed data access at the same time the customer's telephone is in use. The voice telephony is contained within the lower frequencies (e.g., 0 to 4 kHz) of the copper wire, while the upper frequencies (4 kHz to 2 MHz) are used for the data download/upload channels. Significantly, the data user does not "dial-in" or otherwise employ the PSTN in order to reach the Internet; instead, the customer perceives ADSL as an "always on" connection to the Internet.

[&]quot;What is ADSL" at http://www.bell-atl.com/adsl/what_main.html.

Bell Atlantic's current ADSL trial service "sends data at rates up to 1.5 Mbps from the Internet to your home . . . 52 times faster than a conventional 28.8 Kbps modem." "Using ADSL," at http://www.bell-atl.com/adsl/using_main.html. The recently announced "Universal ADSL Working Group" has proposed a set of technical standards to the International Telecommunications Union that would promise a more simplified deployment arrangement, with a service of downstream speeds up to 1.5 Mbps and upstream speeds up to 256 Kbps. "PC, Telecom, & Networking Industry Leaders Unite to Deliver Ultra-Fast Internet Access to the Home," at http://www.ba.com/nr/1998/Jan/19980127004.html.

At the ILEC central office, the local line is connected to an ADSL modem which "splits" the voice from the data frequencies, and the voice traffic is routed to the ILEC's PSTN switch. However, data communications from and to the customer do not enter the ILECs' central office switch; it is separately routed to a digital subscriber line access modem ("DSLAM").²⁶ The DSLAM aggregates Internet traffic onto higher-capacity ATM or fiber facilities, which are ultimately connected to the Internet.²⁷ That final interLATA portion is logically and technically distinct from the xDSL access service portion; other providers, including independent ISPs, can and do offer Internet access that is separate from the local transport to and from the ISP.²⁸

As best CIX can understand Bell Atlantic's offering, its xDSL service would be essentially a local telecommunications service that could possibly be used by consumers for connection to Internet service providers, and no different than Bell Atlantic's ISDN offerings or analog business and residential second line offerings. If Bell Atlantic chooses to market the service bundled with its information service (e.g., Bell Atlantic Internet), its xDSL service must be evaluated as a separate local telecommunications service offering.²⁹

In this way, ADSL could alleviate alleged PSTN switch congestion issues.

See P. Robinson, "DSL v. The World," www.PCComputing.com at 263 (Jan. 1998).

In fact, Bell Atlantic's current ADSL trials in Northern Virginia allow customers to choose either Clarknet or CAIS as the ISP, in addition to Bell Atlantic Internet Services. Moreover, the current Bell Atlantic CEI Plan contemplates that users will choose a separate interLATA ISP.

Compare Bell Atlantic Petition at n.3 (Bell Atlantic's xDSL services are enhanced interstate services), with, AT&T Frame Relay Declaratory Ruling, Memorandum Opinion and Order, 10 FCC Rcd. 13717, 13725 (1995) ("AT&T Frame Relay Order") (Computer II requires a facilities-based carrier engaged in "enhanced" services to separate and tariff its "basic" services) (quoting, Computer II, 77 FCC 2d at 475)).

2. Bell Atlantic Must Clarify That It Requests Deregulation of a Local Telecommunications Service That Employs Its Existing Monopoly

If achieved, the promise of ADSL for the public is largely measured in terms of much greater bandwidth to homes and businesses through the existing ubiquitous network of telephone access lines.³⁰ ADSL promises to deliver over the same wire to the home (a) the POTS voice service, and (b) download data speeds that are many times as fast as today's ISDN rates and 56.6 kbps modems. For the Bell Companies, xDSL is an especially attractive technology because it adds significant value to the existing plant. According to Bell Atlantic, approximately 80% of the homes in the U.S. could be served with ADSL off the existing ILEC infrastructure, at affordable costs.³¹

As such, it is simply disingenuous and confusing for Bell Atlantic to make repeated references to its xDSL service as a nondominant offering, or as an interstate information service. Indeed, if it were able to provide an end-to-end service based on its existing monopoly over local lines and facilities and without Section 271 and 272 safeguards, then it would undoubtedly be a dominant carrier.³² In order for the Commission and interested parties to respond in a fulsome way to the Petition, Bell Atlantic must articulate why the requested deregulation is in the public interest when the service relies --from both a technical or economic perspective -- so intrinsically

According to the ADSL Forum, the high penetration rate of the ILEC existing telephone network makes ADSL a much more attractive option for mass deployment of high bandwidth services to the home than CATV. ADSL Forum, "Growth of Copper Access Lines," at http://adsl.com/copper access growth.html>.

Petition, Attachment 2, at 12.

[&]quot;Regulatory Treatment of LEC Provision of Interexchange Services," <u>Second Report and Order and Third Report and Order</u>, CC Dkt. Nos. 96-149, 96-61, FCC 97-142, ¶¶ 85-92 (rel. April 18, 1997) (dominant carrier regulation applies unless the BOC complies with the mandates of the order, including the Section 272 separate affiliate obligations).

based on its existing monopoly. Bell Atlantic does not make that case, and it is not the responsibility of the public or the Commission to do it for Bell Atlantic.

B. The Bell Atlantic Petition Fails To Address Key Competitive Issues Of the Internet Service Provider Industry.

The Petition also fails to address at least two key competitive issues raised by the deployment of ADSL which will have a significant impact on the existing level of competition in the Internet Service Provider industry. These issues must be developed before the public interest, if any, in the Bell Atlantic Petition can be assessed.

1. <u>Interconnectivity With Other ISPs</u>

The Bell Atlantic completely fails to explain how competing ISPs would interconnect with ADSL facilities to serve end-user customers. Bell Atlantic presumably has some plan for independent ISP connectivity and, in other contexts, it asserts that all xDSL end-users will not be required to subscribe to Bell Atlantic Internet Services. However, these technical arrangements for independent ISPs remain completely unclear. As described in the attached Figures 1, 2, and 3, ADSL deployment could mean that only Bell Atlantic offers its ADSL and Internet service to customers (which CIX strongly opposes) or it could provide for functional and competitive market for the ISP industry.

Without some explanation, CIX and the independent ISP industry cannot know whether Bell Atlantic intends to offer access to its xDSL to any other ISPs, on what terms, or whether such terms would be equivalent to those afforded Bell Atlantic's own ISP. Without this description, CIX submits that the Commission cannot evaluate whether the Bell Atlantic Petition

See "Where Do I Fit In?" at http://www.bell-atl.com/. We also note that Bell Atlantic's xDSL trial in Northern Virginia permits end-users to select from three ISPs: ClarkNet, CAIS, or Bell Atlantic Internet Services. The connection arrangements between the three ISPs, however, are not known.

is, in fact, a proposal to exclude consumers of independent ISPs from gaining access to xDSL and/or inhibit the businesses of such ISPs, to the detriment of the Commission's goals encouraging the competitive provision of Internet services.

2. Collocation and xDSL Distance Limitations

Perhaps the most significant technical issue to independent ISPs is the physical distance limitation inherent in the deployment of any xDSL service. Because of line attenuation issues, xDSL services can only be offered to customers that are within a wired radius of the ILEC office. For example, the ADSL Forum estimates that ADSL download speeds of 1.5 to 2 Mbps can only be offered to customers that are within a wired distance of 18,000 feet of an ADSL-equipped ILEC central office.³⁴ Bell Atlantic claims that "[i]t is the upstream bandwidth that limits the distance," and that only homes within 12,000 feet of an ADSL-equipped ILEC office can participate in Bell Atlantic's ADSL trial.³⁵

Under current FCC rules, independent ISPs are denied collocation at the ILEC office; however, the ILEC's Internet affiliate (such as Bell Atlantic Internet Services) is able to collocate. With the deployment of ADSL, the ILEC's ISP affiliate has a competitive advantage over any other independent ISPs in the market because it has a larger geographic reach to offer ADSL than all of its competitors. For example, assume that ADSL can be deployed only within 18,000 feet of a ILEC office, and that the ISP's office is 5,000 feet from that office because it cannot collocate. (See Figure 4, attached hereto). In such a market, only the ILEC's ISP-affiliate can serve the customers that are located in the geographic range within 18,000 feet and more than

ADSL Forum, "ADSL Tutorial: Twisted Pair Access to the Information Highway," at http://adsl.com/adsl_tutorial.html.

[&]quot;What is ADSL" at http://www.bell-atl.com/adsl/what_main.html.

^{36 &}lt;u>Computer III Inquiry</u>, 104 F.C.C. 2d 958, 1042 (1986).

13,000 feet away from the central office. In that same geographic market, independent ISPs cannot serve the "ring" from 18,000 to 13,000 feet and so are denied ILEC telecommunications services that are afforded the ILEC-affiliated ISP.

Such abuse of monopoly access to the underlying telecommunications service, for the benefit of the ILEC's affiliate, is patently offensive to the Commission's Computer III goals for a competitive information services market. For example, the purpose underlying the "equal access" standard adopted as part of CEI is to "require the basic service functions utilized by the carrier-provided enhanced service to be available to others on an unbundled basis, with technical specifications, functional capabilities, ... equal to those provided to the carrier's enhanced services."37 Discrimination favoring the ILEC-affiliated ISP use of the local telecommunications network is contrary to the Commission's settled policies: "[w]e have long recognized that the basic network is a unique national resource, and our policies have been designed to promote nondiscriminatory utilization of that resource's capabilities."38 While the Commission has declined to provide enhanced service providers with broad collocation rights, it based that decision on the finding that equal access could be achieved in other ways and that "collocation merely reduces transmission costs, it does not address the more general issues of equal functionality "39 In the 1986 Computer III proceeding, however, the Commission could not have anticipated the advent of xDSL technologies, and its inherent distance limitations. With xDSL, collocation becomes a very real issue of "equal functionality," which cannot be resolved through minimizing transport costs.⁴⁰

Computer III Inquiry, 104 F.C.C. 2d at 1036 (emphasis added).

³⁸ Id.

^{39 &}lt;u>Id</u>. at 1038.

^{40 &}lt;u>Cf.</u>, <u>id</u>. at 1042.